

Claims: We claim:

1) An unsolicited message diverting communications processor connected to mail transfer agents

MTA_0 with an Internet address of IP_0, from-address A_0, declared domain of D_0, and actual domain of DD_0, and

MTA_1 with an Internet address of IP_1, to-address A_1, diversion address A'_1, and save_spam database

comprising:

a) monitoring means for monitoring the communications between MTA_0 and MTA_1;
b) determining means for determining if the communications contains an unsolicited message; and

c) intercepting means for

intercepting a RCPT reply from MTA_0,

substituting diversion address A'_1 for to-address A_1 in RCPT reply and sending modified RCPT reply to MTA_1

if the message is determined to be unsolicited and if to-address is in the save_spam database;

whereby MTA_1 controls the interaction between MTA_0 and MTA_1 before a RCPT command from MTA_0 is received and

whereby the connection with MTA_0 is rejected before the data portion of the unsolicited message is transmitted.

2) The unsolicited message blocking communications processor in Claim 1, further includes a allow_address database and wherein the determining means determines if a message is not unsolicited by checking if the IP_0 is in the allow_address database.

3) The unsolicited message blocking communications processor in Claim 1, further includes a prevent_address database and wherein the determining means determines if a message is unsolicited by checking if IP_0 is in the prevent_address database.

4) The unsolicited message blocking communications processor in Claim 1, further includes access to a open relay database and wherein the determining means

determines if a message is unsolicited by checking if IP_0 is in the open relay database.

- 5) The unsolicited message blocking communications processor in Claim 1, further includes access to a DNS (domain name server) database and wherein the determining means determines if a message is unsolicited by checking if IP_0 has a domain name DD_0 in the DNS database.
- 6) The unsolicited message blocking communications processor in Claim 1, further includes a bad_from database and wherein the determining means determines if a message is unsolicited by checking if the from-address A_0 is in the bad_from database.
- 7) The unsolicited message blocking communications processor in Claim 11, further includes a suspect_domain database and wherein the determining means determines if a message is unsolicited by checking if the actual domain DD_0 matches the domain of from-address A_0 and the domain of from-address A_0 is in the suspect_domain database.
- 8) The unsolicited message blocking communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the from-address A_0 matches the to-address A_1.
- 9) The unsolicited message blocking communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the declared domain D_0 of MTA_0 is the same as the domain D_1 of MTA_1.
- 10) The unsolicited message blocking communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the declared domain D_0 of MTA_0 does not match the real domain DD_1 and the declared domain D_0 is in the suspect_domain database.
- 11) The unsolicited message blocking communications processor in Claim 1, further includes a no_filter database and wherein the determining means determines if an unsolicited message should be blocked by checking if to-address A_1 is in the no_filter database.
- 12) The unsolicited message blocking communications processor in Claim 1, further includes a rejected_connection database which logs the time, from-address A_0, to-

address A_1, and the reason for the rejection if a message is rejected if the message is determined to be unsolicited.

- 13) The unsolicited message blocking communications processor in Claim 11, further includes a allowed_connection database which logs the time and to-address A_1 if the message is determine not to be unsolicited.

14) A method for

a receiving networked computer system with an Internet connection, a mail transport agent MTA_1, an Internet address IP_1, to-address A_1, a diversion address A'_1, a save_spam database and an operating system capable of executing the method

to divert unsolicited messages from

a transmitting networked computer system with an Internet connection and a mail transfer agent MTA_0, an Internet address IP_0, from-address A_0, declared domain D_0, and actual domain DD_0

comprising the steps of:

- a) waiting for a new SMTP connection request;
- b) relaying and monitoring the replies from MTA_0 to MTA_1;
- c) relaying replies from MTA_1 to MTA_0;
- d) intercepting the RCPT reply from MTA_0 to MTA_1;
- e) determining if the message is unsolicited by analyzing the monitored replies;
- f) releasing the intercepted RCPT reply if the message is determined not to be unsolicited; and
- g) substituting diversion address A'_1 for to-address A_1 in the RCPT reply and sending the modified reply to MTA_1 if the message is determined to be unsolicited and if recipient address A_1 is in the save_spam database;

whereby MTA_1 controls the interaction between MTA_0 and MTA_1 before a RCPT command from MTA_0 is received and

whereby the connection with MTA_0 is rejected before the data portion of the unsolicited message is transmitted.

15) A method for

a receiving networked computer system with an Internet connection, a mail transport agent MTA_1, IP address IP_1, a domain name D_1, a recipient, A_1, a recipient diversion address A'_1, an allow_address database, a prevent_address database, a suspect_domain database, a bad_from database, a no_filter database, a rejected_connection database, an allowed_connection database, and an operating system capable of executing the method

to divert unsolicited messages from

a transmitting networked computer system with an Internet connection, a mail transfer agent MTA_0, an IP address of IP_0, a declared domain name D_0, a real domain name DD_0, and a sender address of A_0

comprising the steps of:

- a) waiting for a SMTP connection request on the receiving networked computer system's Internet connection;
- b) sending a 220 reply to MTA_0 to acknowledge the requested connection;
- c) extracting IP_0 from the connection request;
- d) requesting the real domain name DD_0 for IP_0 from a DNS database;
- e) testing if the real domain name DD_0 is "no name";
- f) testing if IP_0 is in an open relay database;
- g) testing if IP_0 is in the allow_address database;
- h) testing if IP_0 is in the prevent_address database,
- i) requesting a connection with MTA_1;
- j) waiting for a 220 reply from MTA_1 to acknowledge the requested connection;
- k) waiting for a reply from either MTA_0 or MTA_1;
- l) jumping to step o) if the reply is not from MTA_1;
- m) relaying the reply from MTA_1 to MTA_0;
- n) jumping to step k) to wait for a new reply;
- o) jumping to step u) if the reply from MTA_0 is not a **HELO**;
- p) extracting domain D_0 from the reply;
- q) testing if the declared domain D_0 is the same as D_1;

- r) testing if the declared domain D_0 of MTA_0 does not match real domain DD_0 of MTA_0 AND the declared domain D_0 of MTA_0 is in the suspect_domain database;
- s) relaying the HELO reply from MTA_0 to MTA_1;
- t) jumping to step k) to wait for a new reply;
- u) jumping to step aa) if reply from MTA_0 is not a **MAIL**;
- v) extracting from-address A_0;
- w) testing if A_0 is in the bad_from database;
- x) testing if DD_0 does not match the domain of A_0 and the domain of A_0 is in the suspect_domain database;
- y) relaying MAIL reply to MTA_1;
- z) jumping to step k) to wait for a new reply;
- aa) jumping to step qq) if reply from MTA_0 is not a **RCPT**;
- bb) extracting to-address A_1;
- cc) testing if A_1 is in the no_filter database;
- dd) testing if A_0 matches A_1;
- ee) jumping to step nn) if t_allow OR t_no_filter OR NOT (t_prevent OR t_open OR t_DD_0 OR t_bad_from OR t_suspect_domain OR t_match);
- ff) logging time, A_0, A_1, and reason for rejection in rejected_connection database;
- gg) jumping to step ll) if A_1 is not in the save_spam database;
- hh) looking up A'_1 in the diversion database;
- ii) substituting A'_1 for A_1 in the RCPT reply;
- jj) sending the modified RCPT reply to MTA_1;
- kk) jumping to step k) to wait for a new reply;
- ll) rejecting MTA_0 connection by sending a 550 reply to MTA_0;
- mm) jumping to step k) to wait for a new reply;
- nn) logging time and A_1 in allowed_connection database;
- oo) relaying RCPT from MTA_0 to MTA_1;
- pp) jumping to step k) to wait for new reply;
- qq) jumping to step bbb) if reply from MTA_0 is not **DATA**;
- rr) relaying DATA reply to MTA_1;

ss) waiting for a 354 reply from MTA_1;
tt) relaying the 354 reply from MTA_1 to MTA_0;
uu) waiting for the data from MTA_0;
vv) relaying the data from MTA_0 to MTA_1;
ww) waiting for a .r\n from MTA_0;
xx) relaying the .r\n from MTA_0 to MTA_1;
yy) waiting for a 250 reply from MTA_1;
zz) relaying the 250 reply to MTA_0;
aaa) jumping to step k) to wait for a new reply;
bbb) jumping to step eee) if reply from MTA_0 is not **RSET, SEND, SCML, SAML, VRFY, NOOP, EXPN, HELP, or TURN**;
ccc) relaying reply to MTA_1;
ddd) jumping to step e) to wait for a new reply;
eee) jumping to step jjj) if reply from MTA_0 is not a **QUIT**;
fff) relaying the QUIT reply to MTA_1;
ggg) waiting for 221 reply from MTA_1
hhh) relaying 221 reply from MTA_1 to MTA_0;
iii) jumping to step a) to wait for a new connection;
jjj) sending a 500 reply to MTA_0 to signal a syntax error; and
kkk) jumping to step a) to wait for a new connection.